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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/510,623      | 03/11/2005  | Birger Orten         | 2004-1563A          | 9294             |

513 7590 06/21/2007  
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SUITE 800  
WASHINGTON, DC 20006-1021

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| EXAMINER |
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SAN MARTIN, JAYDI A

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| ART UNIT | PAPER NUMBER |
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2834

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| MAIL DATE | DELIVERY MODE |
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06/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/510,623             | ORTEN, BIRGER       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jaydi A. San Martin    | 2834                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 11 March 2005.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 3/05.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

2. Claim 2, 6 and are objected to because of the following informalities: it is not clear whether the applicants intend to claim "the pockets" or simply the holding details. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 12, 13, 15-18 and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Howarth (US 6438242).

Howard discloses a piezoelectric sensor unit (15) for picking up mechanical vibrations, sound or ultrasound, with:

- at least one piezoelectric foil strip (18) as a sensor element,

- said piezo strip having signal wires (not shown, but disclosed in col. 3, detailed description, lines 14-17) attached thereto for transporting out electrical signals representing vibration, sound or ultrasound picked up,
- wherein said piezo strip at two opposite ends is held in flat support parts (fig. 4), and
- that at least one further strip (14, 16) for receiving vibrations and propagating them to said piezo strip is held in the same support parts so as to extend in a curved manner (fig. 4) along said piezo strip and provide at least one space (25) between the strips;
- support parts are separate support pieces holding details,
- two such further strips, one outside each surface side of said piezo strip (14, 16)
- said further strips are a little stiff, thereby automatically tending to tension said piezo strip,
- that the space between said piezo strip and said further strip is occupied by a substance (air) having the ability to transfer pressure, said piezo strip and said further strip being substantially symmetrically curved outward in a central area to bound said substance;
- support parts forms a bubble that consists of two semi-ovoid foil pieces, and that said at least one further strip constitutes at least one of said two foil pieces.
- piezo strip is arranged outstretched in the space midway between the two foil pieces
- piezo strip additionally is attached and thereby constitutes a boundary between two closed spaces.

Regarding claims 12, 13, 15 and 16, the stated limitations does not differentiates the invention form the prior art. These limitations have been given little patentable weight.

5. Claims 1, 2, 6, 17 rejected under 35 U.S.C. 102(b) as being anticipated by Cragg et al. (US 4186323).

Cragg discloses a piezoelectric sensor unit (Figure 1) for picking up mechanical vibrations, sound or ultrasound, with:

- at least one piezoelectric foil strip (13) as a sensor element,
- said piezo strip having signal wires (21, 22) attached thereto for transporting out electrical signals representing vibration, sound or ultrasound picked up,
- wherein said piezo strip at two opposite ends is held in flat support parts (11, 12), and in that at least one further strip (14) for receiving vibrations and propagating them to said piezo strip is held in the same support parts so as to extend in a curved manner along said piezo strip and provide at least one space between the strips;

support parts are separate support pieces holding details.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-9, 11, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howarth.

Howarth discloses the invention as explained above, but fails to explicitly disclose the use of a welding rim. Howarth does disclose sealing the caps to form individual transducers, that are combined in an array.

Therefore, it would have been obvious at the time of the invention was made to substitute the attaching means used in Howarth's invention by welding rims since The general characteristics, advantageous and disadvantageous of the processes of riveting, soldering, brazing and welding and the characteristics of the joints formed by these processes are well known so that the choice of anyone of them as a substitute for any one of the others to obtain the known or naturally expected advantages of the chosen process presents in general a case of good judgment instead of a case of invention.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howarth.

Howarth discloses the claimed invention as explained in items 4 and 5, but fails to disclose the filling material having a hardness value of the same magnitude as body tissue in an area in and under the skin of a topical listening area of a human body or animal body.

The Examiner takes Official Notice that it is well known in the art that it would have been obvious to one ordinary skill in the art to change the air filling the cavity for other material as necessitated by the specific requirements of a particular application. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fill the cavity with material having a hardness value of the same magnitude as body tissue in an area in and under the skin of a topical listening area of a human body or animal body since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

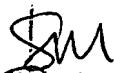
***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. San Martin whose telephone number is 571-272-2018. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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Patent Examiner-Class 310  
Art Unit 2834